

HYSTEROGRAPHY IN CASES OF HABITUAL ABORTIONS†

by

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Habitual abortion, though not a common problem, is a frustrating handicap to a woman who is desirous of having a child. Genital tract abnormalities like cervical incompetence, intrauterine synechiae, hypoplastic uterus, bicornuate and unicornuate uterus are usually incriminated as common etiological factors for habitual abortions. Diagnosis of the exact nature of these anomalies is possible by hysterosalpingography. Helbrecht (1951) and Rozin (1965) reported an incidence of uterine anomalies in 30% and 44% of their respective series of cases of habitual abortions. Palmer (1905) reported an incidence of uterine anomalies in 85% of women with 3 or more abortions. Krishna *et al* (1970) reported an incidence of 31% uterine abnormalities in the cases of habitual abortions.

In view of the fact that habitual abortions comprise a formidable problem in obstetrical practice, a study was carried out to ascertain the role of hystero-graphy as an important diagnostic method to detect the cause of recurrent abortions particularly in cases where clinical examination is inconclusive.

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Material and Methods

The present study was carried out at T.N. Medical College & B. Y. L. Nair Ch. Hospital for a period of 3 years from January 1975 to December 1977. Only those cases with history of 3 or more consecutive abortions were included in the study. In addition to detailed history and clinical examination, routine investigations like complete haemogram, urine examination, blood grouping, serological test for syphilis were done in all the cases. Blood urea, glucose tolerance and semen examinations were done wherever indicated.

Hysterosalpingography was carried out in the week following cessation of menstrual flow in order to avoid the possibility of disturbance of early pregnancy. The dye used was 40% Diaginol viscous w/v. The radiographic exposure was taken on a plate of the size 10" x 8" with 80 kv, 50 MAS with Buckey, cassette and parspeed screen.

A total of 42 cases of habitual abortions were subjected to hystero-graphy with the object of findings out any defect in size and shape of the uterus, cervical canal or any other abnormality which could be responsible for habitual abortion.

Results

As shown in Table I hystero-graphy revealed normal uterus and cervix in 47.6%

TABLE I
Hystero-graphic Findings

Nature of Abnormality	No. of Cases	(%)
Bicornuate uterus	2	(4.8%)
Unicornuate uterus	1	(2.4%)
Hypoplastic uterus	2	(4.8%)
Arcuate Uterus	1	(2.4%)
Filling defect due to fibroid	1	(2.4%)
Uterine Synechae	2	(4.8%)
Funneling of the int. os	9	(21.4%)
Cervical fibroid	1	(2.4%)
Ovarian cyst.	1	(2.4%)
Tuberculous endometritis	2	(4.8%)
Normal findings	20	(47.6%)
	42	

of cases, and abnormalities either developmental or acquired in 52.4% of the cases. The commonest abnormality was funnelling of the internal os in 9 (21.4%) cases. Other abnormalities included developmental anomalies like unicornuate or bicornuate uterus (Figs. 1 & 2) hypoplastic uterus and acquired anomalies like intrauterine synechae, fibroids (Fig. 3) ovarian cyst, etc. In 2 cases uterine tuberculosis was suspected from the hystero-graphic findings such as irregular cavity, extravasation of dye, and nodular irregular appearance of tubes. The diagnosis was later on proved by endometrial biopsy.

Palmer *et al* (1965) reported funneling of the internal os as common finding in 31.9% and 34.2% of the cases form their two consecutive series. Schonfeld *et al*

(1967) reported incidence of abnormal hystero-grams in 82.85% of their cases.

Commonest abnormality in their series was hypoplastic uterus in 29.5% and funnelling of the internal os in 12.2% of the cases. In our series, abnormalities noted were funnelling of the internal os in 21.4%, hypoplastic uterus in 4.8%, bicornuate uterus in 4.8%, unicornuate uterus in 2.4%, and fibroids in 4.8% of the cases.

Discussion and Conclusions

Hysterosalpingography was introduced initially to evaluate tubal factor in sterility and even now is most commonly employed for the same. But with passage of time and better understanding of the indications for its use have increased especially in cases of uterine hypoplasia, congenital malformation of uterus, endometrial tuberculosis and cases of habitual abortions.

As seen from the presented data hystero-graphy proved to be a valuable diagnostic method to detect the congenital or acquired anomalies of the genital tract responsible for habitual abortions especially in cases where clinical examination is either normal or inconclusive. In our series of 42 cases of habitual abortions, abnormalities either developmental or acquired were revealed in 52.4% of the cases and commonest anomaly noted was funnelling of the internal os in 21.4% of the cases. This compares well with most of the other authors.

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See Figs. on Art Paper VIII, IX